IN THE SPECIFICATION:

Please amend paragraph 3, bridging pages 1 and 2 with the following paragraph:

The data bus includes, for at least some of the nodes, optical transmission segments. The messages are converted into electric signals and converted via a receiver/transmitter unit once again into a preferably optical signal telegram which is thus transmitted to all the remaining nodes. A data bus of this type with at least one partially optical transmission segment include a particular characteristic the signal transit time, that is, the time for the transmission of a signal from one node to another is significantly greater than the bit time. In contradistinction thereto the signal transit time in the case of a purely electrical data bus, as, for example, is frequently used in vehicles under the designation CAN (Controller Area Network), is significantly smaller than the bit time. An additional difficulty due to the sharply differing signal transit times arises when additional nodes are connected to the data bus which themselves output (only) electrical signals.

Please amend the last paragraph bridging pages 8 and 9, with the following paragraph:

If these equations are applied to the bus configuration of Figure 1, then the parameters follow as entered in Figure 5 for the individual node. In Figure 5 the signal curves are furthermore shown which the individual nodes see at their bus connection. It can be seen from Figure 5 that, by the adaptation of the fixed

percentage of the wait time t_wx0_tx and t_wx0_rx, the nodes are synchronized. The start time of a SIGNAL then no longer depends on the different signal transit times in the system (from optical and in a given case electrical transmission segments from and to the star coupler) but rather only on the identifier of the signal to be transmitted and the allocation of the data bus by a (more important) telegram with lower identifier. If the nodes would all transmit one and the same telegram with an identical identifier, they would do this simultaneously. Since only one node transmits each telegram with a certain identifier, a collision of signals is avoided.